Before the

FEDERAL COMMUNICATIONS COMMISSION

Washington, DC 20554

In the Matter of	)	
	)	
Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation	)	ET Docket No. 93-62
	)	
	)	

REPLY TO COMMENTS OF AT&T WIRELESS SERVICES, INC.

The Cellular Phone Taskforce submits this reply to the Comments on Petitions for Reconsideration of AT&T Wireless Services, Inc. ("AT&T"), dated October 8, 1996, in the above-captioned proceeding.

The Final Rules which became effective August 6, 1996 are designed to protect the public from any dangers which might otherwise arise from the current and expected proliferation of cellular and other radiofrequency transmitting devices, as well as serving as guidelines to carriers to safely provide their services.

The Cellular Phone Taskforce represents many electrosensitive individuals and others for whom the establishment of adequate protective regulations is vital.

We disagree with several portions of the Comments of AT&T, as follows:

1. Transmitter sites should be excluded from residential areas.

The Petition for Reconsideration of the Cellular Phone Taskforce requested that the Commission modify Section

1.1307 to require routine environmental evaluation of all transmitters, facilities, and operations that are less than 2000 feet from any residence. This request was made in order to ensure compliance with the much more stringent exposure limitations that will be required in Section 1.1310 in order to protect electrosensitive individuals. Indeed, as was noted in the Petition of the Cellular Phone Taskforce, the information necessary to set standards which will protect the health of electrosensitive people is only now becoming available. Some relevant studies are still in progress.

For example, a series of epidemiological studies have been underway in Skrunda, Latvia since 1989 to determine the health effects of a nearby radar station which operates in the 156-162 MHz frequency range. This radar has operated since 1971, so there has been an opportunity to compare current conditions with those that existed before 1971. The radar will cease operation in 1998, therefore current studies will continue until after that date. The first reports were published this year. Levels of exposure in the study area are generally below 0.1 uW/cm^2 (microwatts per square centimeter), and at no homes in the area does the power density exceed 10 uW/cm^2.[1] The following biological effects have been found:

---

[1] T. Kalnins et al., "Measurement of the intensity of electromagnetic radiation from the Skrunda radio location station, Latvia, The Science of the Total Environment 180 (1996): 51-56.

Motor function, reaction time, memory and attention are significantly impaired among school children who live in exposed areas as compared to those in unexposed areas. There are also up to 25% fewer boys in certain grades in the area exposed to the radar.[2]

Chromosome damage is found in cows living in the Skrunda radiation zone that is not found in nearby cows not exposed to the radar.[3]

Morphological and developmental abnormalities have been found in duckweed plants grown in the exposed area that are not found in plants grown in unexposed areas. They also have a shorter life span and impaired reproduction.[4]

Trees growing in pine forests in the exposed area have had decreased thickness of growth rings beginning after 1970, which coincided with the start of operation of the radar. Nearby unexposed trees have not been similarly affected.[5]

Study of pine needles and cones revealed accelerated resin production and premature aging of pine trees in the

---

[2] A.A. Kolodynski and V.V. Kolodynska,"Motor and psychological functions of school children living in the area of the Skrunda Radio Location Station in Latvia", Ibid., 87-93.

[3] Z. Balode, "Assessment of radio-frequency electromagnetic radiation by the micronucleus test in Bovine peripheral erythrocytes", Ibid., 81-85.

[4] I. Magone, "The effect of electromagnetic radiation from the Skrunda Radio Location Station on Spirodela polyrhiza (L.) Schleiden cultures", Ibid., 75-80.

[5] V. Balodis et al., "Does the Skrunda Radio Location Station dimish the radial growth of pine trees?" Ibid., 57-64.

exposed area, even in locations where the exposure level is only 24 pW/cm^2 (picowatts per square centimeter), as compared with trees in nearby unexposed areas. Also, the germination of low exposure seeds was enhanced, while the germination of higher exposure seeds was severely impaired. "Similar growth stimulation in the early stages of development, and later promoted reproduction and senescence, were found to be effects of UV irradiation and the chemical retardant Ethephon."[6]

No studies of the Skrunda area have been published which fail to show adverse health or environmental effects of exposure to radiation from the radar. Indeed these effects have been found at such low levels of exposure (24×10^{-12} W/cm^2) that to prevent injury to sensitive individuals, the Commission's Final Rules should be amended to prohibit all emitters of radiofrequency signals in residential areas without exception, and to establish a buffer zone of 2000 feet from any property line, inside which no radiofrequency facility may be erected. Indeed communities all over the country have passed ordinances excluding radiofrequency transmitters from residential zones,[7] which may now be preempted by Section 1.1307(e), and by Section 704(a) of the Telecommunications Act of 1996. By prohibiting transmitters from residential zones on a national level, as the Cellular

---

[6] T. Selga and M. Selga, "Response of Pinus sylvestris L. needles to electromagnetic fields. Cytological and ultra-structural aspects", Ibid., 65-73.

[7] Wall Street Journal, July 2, 1996, p. 1; Microwave News, Nov./Dec. 1995, p. 12 and May/June 1996, p. 9.

Phone Taskforce is now requesting, the Commission will accommodate the well-founded concerns of a majority of local governments and private citizens, thereby preventing an enormous amount of litigation which is already proving burdensome both to the court systems of this country and to AT&T and other carriers. Prohibiting transmitters from residential zones will also result in fewer Environmental Assessments being required, and therefore constitute less burdensome regulation for the carriers. Finally, such prohibition will more effectively protect the lives of the vulnerable electrosensitive population and others, in the light of these new epidemiological findings.

2. The Commission should not restore a categorical exemption for all paging and cellular licensees

AT&T states it agrees with the petition of Paging Network in this matter (AT&T Comments, p. 4). But by Paging Network's own admission (Paging Netowrk Petition, p. 3), the Commission has vastly underestimated the number of affected transmitters, as the new power limits are 3500 Watts ERP, vs. the old 1000 Watts ERP, for paging technology. Because compliance with emission limits is not so easily met as with lower power transmitters, therefore the categorical exemption for paging facilities has been justly removed.

The Cellular Phone Taskforce similarly opposes a categorical exclusion for cellular facilities that operate above 1000 Watts ERP.

The Taskforce also opposes AT&T's request to exempt the facilities it uses for data-only services, since these are expected to proliferate rapidly in the near future.

3. Power density and field strength limits at multi-transmitter sites should not be increased above one percent

In view of the current and expected proliferation of radiofrequency transmitters of all categories, a 10% trigger for area-wide compliance obligations would potentially leave a great many areas effectively excluded from regulation, contrary to the intent of the Telecommunications Act of 1996, which is to set standards for the safe operation of transmitting facilities and the protection of the public. If no facility in an area passed the 10% threshold, that area would not be brought into compliance. This is unlikely ever to happen with the existing 1% threshold, which should stand.

4. The January 1, 1997 compliance date should stand

A delay in implementation of the new regulations for an additional year would allow the proliferation of an unlimited number of facilities authorized under part 15, subparts E and H of part 22, part 90, and part 97 during that year. The Commission has correctly recognized that these types of facilities fall within the intent of the Telecommunications Act of 1996 as requiring environmental regulation due to the rapid expansion of these industries. Therefore the Cellular Phone Taskforce opposes delaying the implementation of regulations past January 1, 1997.

5. AT&T's requests would prevent effective regulation

Section 704(b) of the Telecommunications Act of 1996 required the Commission to make effective rules regarding the environmental effects of radiofrequency emissions. The categorical exemption of all paging and cellular facilities, the 10% trigger for area-wide compliance obligations, and the one year delay in implementation of the new regulations, all of which AT&T is requesting, would allow the unrestricted and unregulated proliferation of a great majority of new facilities in these rapidly expanding industries. This would not constitute "effective rules" and would be contrary to the intent of the Telecommunications Act. The failure to effectively regulate the environmental effects of radio-frequency emissions would very seriously impact vulnerable people such as the electrosensitive, who are represented in this matter by the Cellular Phone Taskforce. Attached hereto, in this regard, is a letter that was sent to the Commission by the Electrical Sensitivity Network, dated September 19, 1996, explaining the seriousness of this threat to the lives of the electrosensitive and the necessity of making rules that will protect the health of those who by medical necessity must avoid all exposure to electro-magnetic radiation.

In this same regard, Norbert Hankin of the Office of Radiation and Indoor Air, Environmental Protection Agency, has written (letter to David Fichtenberg, October 8, 1996):

"The FCC does not claim that their new exposure guidelines provide protection for effects to which the 4 W/kg SAR basis does not apply. . . . Both the NCRP and ANSI/IEEE standards are thermally based, and do not apply to chronic, nonthermal exposure situations." Chronic, nonthermal exposure situations are precisely the types of situations that will proliferate without control in the near future under the guidelines established August 6, 1996 by the Commission, and they are precisely the types of situations that will seriously damage the health of vulnerable populations such as the electro-sensitive. The Final Rules therefore need to be amended as requested in the Petition for Reconsideration of the Cellular Phone Taskforce, and as further requested in this Reply, to protect these populations from injury.

PO Box 4146
Prescott, AZ 86302 USA
Phone: (520) 778-4637

ELECTRICAL SENSITIVITY NETWORK

September 19, 1996

Reed E. Hundt
Chairman
Federal Communications Commission
1919 M Street NW
Washington DC 20554

Dear Mr. Hundt:

One critical oversight in the passage of the Telecommunications Act of 1996 and in subsequent establishment of applicable radiation standards was neglect of the electrically sensitive (ES) population—people who are made ill when exposed to normal levels of electromagnetic fields (EMFs). The ES must, by medical necessity, avoid EMF exposure.

As the future proliferation of telecommunications technology engulfs the entire earth in microwave broadcast transmissions, even from satellites, where will the ES go then? Under the present FCC radiation standards, the ES will be physically tortured by this flood of electromagnetic sources beyond their control. Some of the most sensitive may die from exposure to certain frequencies that are life-threatening for them, particularly those who develop heart irregularities when EMF exposed. This problem is very serious; the health and life of this disabled group is at risk.

This vital disability issue must be addressed as part of the Americans with Disabilities Act. I implore your office to plan a hearing to discuss how the problems of electrical sensitivity can be accommodated within this novel technological onslaught.

Sincerely,

Lucinda Grant
LG:ja

cc: FCC Commissioners:
Andrew C. Barrett
Rachelle B. Chong
Susan Ness
James H. Quello
National Council on Disability
President Bill Clinton
The EMR Alliance

Enclosure

Respectfully submitted,

By Arthur Firstenberg

Arthur Firstenberg, Chairman
Cellular Phone Taskforce
Post Office Box 100404
Vanderveer Station
Brooklyn, New York 11210
(718) 434-4499

October 15, 1996

I, Arthur Firstenberg, hereby certify that a true and correct copy of this Reply was sent, via U.S. mail, first class, postage paid, to:

Cathleen A. Massey
Vice President - External Affairs
AT&T Wireless Services, Inc.
1150 Connecticut Avenue, NW
Suite 400
Washington, DC 20036

Arthur Firstenberg
Arthur Firstenberg